

Abstract

The present invention relates to an olefin derived copolymer and a thermoplastic resin composition using the olefin derived copolymer satisfying the following (1) and (2): (1) tensile strength at break measured based on JIS K6251 is 2.0 or less MPa; and (2) tensile elongation at break EB (%) of a resin composition obtained satisfies the following relational expression (expression 1) and (expression 2), when blended with a polypropylene derived resin that has 20 degree C xylene soluble component of not more than 20 wt%.

$$R[3/5] - R[2/6] \geq 0.15 \quad \text{--- (expression 1)}$$

$$S[2/6] \geq -800 \quad \text{--- (expression 2)}$$

(R [3/5] and R [2/6] are obtained by the following methods: a curve is obtained by plotting tensile elongation at break EB (%) (based on JISK6251) of resin composition taken as vertical axis, and weight part rate Pa of a content of an olefin derived copolymer contained in a resin composition taken as horizontal axis; a multiple regression curve in section regions of Pa = 0.30 - 0.50 and Pa = 0.20 - 0.60 (Pa represents content weight percentage of an olefin derived copolymer contained in a resin composition) of a multiple regression expression obtained by quintic multiple regression of the curve is obtained; R [3/5] and R [2/6] are defined as multiple correlation coefficients of a primary straight line obtained by approximating of the multiple regression curve by method of least squares. S [2/6]

represents a gradient of a primary straight line (expression) obtained by approximating the above-mentioned multiple regression curve by a method of least squares in section region of $Pa = 0.20 - 0.60$. In addition, in the above-mentioned multiple regression expression, it is indispensable that data at least seven points $Pa=0.00, 0.20, 0.30, 0.40, 0.50, 0.60$ and 0.70 are contained. Furthermore, when data at points of number beyond above case are contained, it is indispensable that total Pa values exist at 0.10 or less of fixed interval mutually.